

WHAT IS CLAIMED IS:

1. A microscope comprising:
 - a base which is made of a first aluminum alloy;
 - 5 a frame which is made of ceramic-containing a second aluminum alloy that has a lower coefficient of thermal expansion than said first aluminum alloy, provided on said base and which supports a stage for mounting a specimen;
 - an arm which is made of said first aluminum alloy,
 - 10 provided on said frame and which supports an objective lens;
 - an observation optical system which is provided on said arm;
 - an illumination optical system which is integrated
 - 15 with said arm and which has a light source for illuminating said specimen;
 - a power supply which is provided in said frame and which turns on said light source;
 - a protrusion portion which diminishes a contact area
 - 20 between said frame and said arm and which is formed on said frame to reduce focal point shift due to thermal expansion caused by said illumination optical system; and
 - a bolt which fastens said arm and said protrusion portion of said frame together to establish a contact state.
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2. A microscope comprising:
 - a base;
 - a frame which is provided on said base and which supports a stage for mounting a specimen;
 - 30 an arm which is provided on said frame and which supports an objective lens;
 - an illumination optical system which is integrated with said base and which has a light source for illuminating said specimen;
 - 35 an observation optical system which is provided on said arm;

a metal plate which is provided in said frame and which supports a power supply which turns on said light source; and

5 a resilient tab which is provided on said metal plate and serves to secure said metal plate to said frame.

3. A microscope comprising:

a base;

10 a frame which is provided on said base and which supports a stage for mounting a specimen;

an arm which is provided on said frame and which supports an objective lens;

an observation optical system which is provided on said arm;

15 an illumination optical system which is integrated with said base and which has a light source for illuminating said specimen;

20 a member which is splayed on said arm, provided between said frame and arm, and which has a lower coefficient of thermal expansion than said arm; and

a bolt which fastens said arm and said frame together through said member.

25 4. The microscope according to claim 3, wherein: said base, said frame, and said arm are made of aluminum alloy; and said member is made of ceramic.

5. A microscope comprising:

30 a base;

a frame which is provided on said base and which supports a stage for mounting a specimen;

an arm which is provided on said frame and which supports an objective lens;

35 an observation optical system which is provided on said arm;

an illumination optical system which is integrated with said base and which has a light source for illuminating said specimen;

5 a spacer which is provided between said frame and arm and which has a higher coefficient of thermal expansion than said arm; and

a bolt which fastens said arm and said frame together through said spacer.

10 6. The microscope according to claim 5, wherein:
said base, said frame, and said arm are made of aluminum alloy; and
said spacer is made of magnesium.

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